**PLEASE AMEND THE TITLE AS FOLLOWS:**

Please replace the title with the following title:

GIANT MAGNETORESISTIVE (GMR) SENSOR ELEMENT WITH ENHANCED MAGNETORESISTIVE (MR) COEFFICIENT

**PLEASE AMEND THE CLAIMS AS FOLLOWS:**

Please cancel claim 2.

Please cancel claim 14.

Please amend claim 1 as follows:

Claim 1. (AMENDED) A method for forming a giant magnetoresistive (GMR) sensor element with an enhanced magnetoresistive coefficient comprising:

providing a substrate;

forming over the substrate a double-layer seed layer, said double layer comprising a first material layer selected from the group of magnetoresistive (MR) resistivity sensitivity enhancing material consisting of nickel-chromium alloys and nickel-iron-chromium alloys and said double-layer seed layer further comprising a second material layer, said material layer being a thin, non-magnetic dielectric nickel oxide material layer that additionally enhances magnetoresistive (MR) resistivity sensitivity;

forming over the double-layer seed layer a free ferromagnetic layer;

forming over the free ferromagnetic layer a non-magnetic conductor spacer layer;

forming over the non-magnetic conductor spacer layer a pinned ferromagnetic layer; and